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=> fil wpix

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=> d que 125 L1 (240 L2 (118 L3 (

1 (24020)SEA FILE=WPIX ABB=ON PLU=ON A61K007-00/IPC

(11826)SEA FILE=WPIX ABB=ON PLU=ON A61K007-06/IPC (776)SEA FILE=WPIX ABB=ON PLU=ON D08-B07/MC

L4 (89690)SEA FILE=WPIX ABB=ON PLU=ON D21/DC

L5 (485) SEA FILE=WPIX ABB=ON PLU=ON (?TELOMERA? OR TEL OMERA? OR ?TELO MERA?) /TI, BIX, TT

L6 (8) SEA FILE=WPIX ABB=ON PLU=ON L5 AND (L1 OR L2 OR L3 OR L4)

L7 (25262) SEA FILE=WPIX ABB=ON PLU=ON (A61K048-00 OR A61K031-19 OR A61K031-4745 OR A61K031-56)/IPC

L8 (103237) SEA FILE=WPIX ABB=ON PLU=ON (B01-D02 OR B02-E OR B02-P OR B04-B03A OR B04-B03C OR B04-E01 OR B06-D02 OR B06-D09 OR B06-D18 OR B07-A04 OR B08-B OR B10-E04 OR B14-D06B OR B14-R02 OR D05-H12A OR D05-H12D)/MC

L9 (12031) SEA FILE=WPIX ABB=ON PLU=ON (C01-D02 OR C02-E OR C02-P OR C04-B03A OR C04-B03C OR C04-E01 OR C06-D02 OR C06-D09 OR C06-D18 OR C07-A04 OR C08-B OR C10-E04 OR C14-D06B OR C14-R02) / MC

L10 (118967)SEA FILE=WPIX ABB=ON PLU=ON (L7 OR L8 OR L9) NOT (C14-R02 OR B14-R02)/MC

L11 (4750)SEA FILE=WPIX ABB=ON PLU=ON (C14-R02 OR B14-R02)/MC

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3108) SEA FILE=WPIX ABB=ON PLU=ON L10 AND ((L1 OR L2 OR L3 OR L4)
L12 (
               OR L11)
           363) SEA FILE=WPIX ABB=ON PLU=ON L12 AND L2
L13 (
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L14 (
               AY<2002)
            74) SEA FILE=WPIX ABB=ON PLU=ON L14 AND (?HAIR? (5A) (?REDUC? OR
L15 (
                ?REGU? OR ?MODU? OR ?IMPED? OR ?INHIB? OR ?SLOW? OR ?STOP? OR
                ?BLOCK? OR ?RUPT? OR ?VENT? OR ?AGON? OR ?HALT?))/BIX
              8) SEA FILE=WPIX ABB=ON PLU=ON L14 AND (?HAIR? (5A) ?REMOV?)
L16 (
             6) SEA FILE=WPIX ABB=ON PLU=ON L14 AND (?DEPIL? OR DE PIL?)
L17
             81) SEA FILE=WPIX ABB=ON PLU=ON L15 OR L16 OR L17
L18 (
            89 SEA FILE=WPIX ABB=ON PLU=ON L18 OR L6
L19
             8 SEA FILE=WPIX ABB=ON PLU=ON L19 AND ?TELOMER?/BIX
L20
             3 SEA FILE=WPIX ABB=ON PLU=ON L20 NOT (1999-444196/AN OR
L21
                2000-400055/AN OR 2000-412129/AN OR 2004-157106/AN OR 2004-2391
                17/AN)
             14 SEA FILE=WPIX ABB=ON PLU=ON (1983-45402K/AN OR 1984-277375/AN
L23
                OR 1985-159178/AN OR 1986-119079/AN OR 1992-096580/AN OR
                1993-153849/AN OR 1993-167280/AN OR 1995-328081/AN OR 1997-3103
                50/AN OR 1997-448705/AN OR 2000-545818/AN OR 2001-229036/AN OR
                2001-582276/AN OR 2002-454495/AN)
             14 SEA FILE=WPIX ABB=ON PLU=ON L23 AND (L1 OR L2 OR L3 OR L4 OR
L24
               L5 OR L6 OR L7 OR L8 OR L9 OR L10 OR L11 OR L12 OR L13)
             17 SEA FILE=WPIX ABB=ON PLU=ON L21 OR L24
L25
=> d 125 all abeq tech abex 1-17
     ANSWER 1 OF 17 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
L25
     2003-486262 [46]
                       WPIX
AN
DNC
     C2003-130619
     Cellular aging inhibitor for preventing aging of skin, stomach, intestine,
     liver and kidney, comprises solvent extract of Ganoderma lucidum.
DC
     (NONO-N) NONOGAWA SHOJI KK
PΑ
CYC
     JP 2003012539 A 20030115 (200346)*
                                                 4 A61K035-84
     JP 2003012539 A JP 2001-201225 20010702
ADT
PRAI JP 2001-201225
                          20010702
     ICM A61K035-84
          A23L001-28; A23L001-30; A61K007-00; A61K007-48; A61P001-00;
          A61P001-16; A61P013-12; A61P017-00; A61P043-00
     JP2003012539 A UPAB: 20030719
     NOVELTY - Cellular aging inhibitor or a telomere shortening
     inhibitor comprises a solvent extract of Ganoderma lucidum.
          ACTIVITY - Dermatological; Hepatotropic; Nephrotropic.
          MECHANISM OF ACTION - Cellular aging inhibitor; Telomerase
     inhibitor.
          In a test, human normal skin fibroblast was seeded in a culture
     medium containing hot water extract of black reishi mushroom, bovine serum
     (10%) and ascorbic acid magnesium phosphate at 37 deg. C for 7-9 days.
     After cultivation, the cell was dispersed in phosphoric acid buffer (pH
```

6.8) containing trypsin (0.025%) and ethylene diamine tetra acetate (0.02%). The number of cells after cultivation was increased compared to before cultivation which showed that black reishi mushroom had a good telomerase inhibitor effect.

USE - Used for preventing aging of skin, stomach, intestine, liver and kidney. Dwg.0/0

FS CPI

```
AB; DCN
FA
MC
     CPI: B04-A08D; B14-N17
                    UPTX: 20030719
TECH
     TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred Components: The solvent
     used for the extraction of black reishi mushroom is water, lower alcohol
     and/or liquid polyhydric alcohol.
                    UPTX: 20030719
ABEX
     EXAMPLE - Dried black reishi mushroom (20 g) was added to purified water
     (400 ml) and extracted at 95-100degreesC for 2 hours. The filtrate was
     concentrated and frozen to obtain black reishi mushroom extract.
     ANSWER 2 OF 17 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
L25
     2003-221439 [21] WPIX
AN
DNC C2003-056213
     Reducing mammalian hair growth comprises applying telomerase
TI
     inhibitor to selected skin area.
DC
     B05 D16 D21
     AHLUWALIA, G S; STYCZYNSKI, P
IN
     (AHLU-I) AHLUWALIA G S; (STYC
                                                          GILLETTE CO
PΑ
CYC
     101
                                      pplicants
PΙ
     WO 2003002077
                    A2 20030109
                                                          (007-00
        RW: AT BE CH CY DE DK EA
                                                          IT KE LS LU MC MW MZ
            NL OA PT SD SE SL SZ/
         W: AE AG AL AM AT AU AZ
                                                         CN CO CR CU CZ DE DK
            DM DZ EC EE ES FI GE
                                                         IN IS JP KE KG KP KR
                                                         MZ NO NZ OM PH PL PT
            KZ LC LK LR LS LT LV
                                                         UG US UZ VN YU ZA ZM
            RO RU SD SE SG SI SK SE-
            ZW
     US 2003012755
                     A1 20030116 (200321)
                                                      A61K048-00
                     A2 20040331 (200424) EN
     EP 1401379
                                                      A61K007-00
         R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
            RO SE SI TR
ADT
     WO 2003002077 A2 WO 2002-US18702 20020612; US 2003012755 A1 US 2001-893252
     20010627; EP 1401379 A2 EP 2002-734785 20020612, WO 2002-US18702 20020612
     EP 1401379 A2 Based on WO 2003002077
PRAI US 2001-893252
                          20010627
     ICM A61K007-00; A61K048-00
     ICS A61K007-06; A61K031-19; A61K031-4745; A61K031-56
     WO2003002077 A UPAB: 20030328
     NOVELTY - Reducing hair growth comprises applying a telomerase
     inhibitor to a selected area of skin.
          DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the
     following:
          (1) reducing mammalian hair growth which comprises selecting an area
```

(1) reducing mammalian hair growth which comprises selecting an area of skin including hair follicles and applying a compound that reduces telomerase levels, telomerase mRNA expression or promotes the erosion of telomeric DNA in the hair follicles to

the skin, and

(2) a composition comprising the **telomerase** inhibitor, a carrier and at least one of an emollient, thickener, humectant, powder or skin penetration aid.

ACTIVITY - None given in the source material. MECHANISM OF ACTION - **Telomerase** inhibitor.

A composition containing AZT (10 weight%) in vehicle containing water (68%), ethanol (16%), propylene glycol (15%), dipropylene glycol (5%), benzyl alcohol (4%) and propylene carbonate (2%) was tested using Golden Syrian Hamster assay. A vehicle containing AZT (10%) was applied to an organ of the animal. Inhibition of flank organ hair growth was demonstrated following the topical administrable of the composition. The reduction of hair growth was calculated after applications (one

```
application per day for 5 days a week). The hair mass value was 2.10 plus
     or minus 1.8 mg and percentage inhibition was 22 plus or minus 7.
          USE - Used for reducing unwanted mammalian (e.g. human) hair growth
     (preferably androgen stimulated hair growth) and in a cosmetic (claimed).
          ADVANTAGE - The composition reduces hair growth by at least 15
     (preferably 20)% when tested in the Golden Syrian Hamster assay.
     Dwg.0/0
     CPI
FS
     AB; DCN
FΑ
     CPI: B01-D02; B02-E; B02-P; B04-B03A; B04-B03C; B04-E01; B06-D02; B06-D09;
MC
          B06-D18; B07-A04; B08-B; B10-E04; B14-D06B; B14-R02; D05-H12A;
          D05-H12D; D08-B07
                    UPTX: 20030328
TECH
     TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Components: The
     telomerase inhibitor comprises floxacin, TMPyP4,
     telomerase inhibitor I, telomerase inhibitor IV,
     telomerase inhibitor V, AZT, rubromycin, purpuromycin,
     3'-deoxy-2:3'-didehydrothymidine, dideoxyinosine, (TTAGGG)3, levofloxacin,
     carbovir, ACGTTGAGGGGCATC, 2-(3(trifluoromethyl)phenyl)isothiazolin-3-one,
     ursodeoxycholic acid, diazaphilonic acid, alterperylenol, 5-azacytidine,
     3,4,9,10-perylenetetracarboxylic diimide-based ligand,
     10H-indolo(3,2-b)quinoline, 2'-O-MeRNA telomerase oligomer,
     2'-O-alkyl RNA telomerase oligomer, fomivirsen, a cationic
     porphryin, diazaphilonic acid, telomerase inhibitor II,
     telomerase inhibitor III, telomerase inhibitor VI,
     telomerase inhibitor VII or telomerase inhibitor VIII.
     Preferred Composition: The composition also includes a second component
     that also causes a reduction in hair growth.
                   UPTX: 20030328
ABEX
     ADMINISTRATION - The application amount is 10-3000 mug/cm2 topically to
     the skin of the face, a leg, an arm, an armpit or on the torso, or in
     conjunction with the shaving or a woman with hirsutism (claimed).
     ANSWER 3 OF 17 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
     2003-057488 [05]
                        WPIX
     C2003-014671
DNC
     Inhibitor against replicative senescence of human keratinocytes, useful
     for treating oral diseases such as trauma-caused inflammation, traumatic
     ulcer, angular cheilosis, comprises retinoic acid as active ingredient.
DC
     B05 D21
IN
     MIN, B M; MIN, B
PΑ
     (MINB-I) MIN B M; (MINB-I) MIN B
CYC
                                                22
PΙ
     US 2002123526
                    A1 20020905 (200305)*
                                                      A61K031-203
     KR 2002011918
                     A 20020209 (200305)
                                                      A61K031-203
     US 6566399
                    B2 20030520 (200336)
                                                      A01N037-00
     US 2002123526 A1 US 2001-922070 20010803; KR 2002011918 A KR 2001-46911
ADT
     20010803; US 6566399 B2 US 2001-922070 20010803
                          20010803; KR 2000-44972
                                                         20000803
PRAI KR 2001-46911
     ICM A01N037-00; A61K031-203
     ICS A61K007-16
     US2002123526 A UPAB: 20030121
AΒ
     NOVELTY - An inhibitor (I) against replicative senescence of human
     keratinocytes, comprises a retinoic acid (II) as active ingredient.
          DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:
          (1) a prophylactic or therapeutic agent for oral disease, containing
     (II), where the oral disease is chosen from trauma-caused inflammation,
     exelcymosis-caused inflammation, burn-caused inflammation, traumatic
     ulcer, and angular cheilosis;
          (2) a cosmetic purpose containing (II); and
```

(3) a prophylactic or therapeutic agent for wound-caused dermatitis and skin senescence containing (II).

ACTIVITY - Antiinflammatory; Antiulcer; Vulnerary; Dermatological. No biological data available.

MECHANISM OF ACTION - Inhibitor of replicative senescence of human mucosal keratinocytes and human epidermal keratinocytes (claimed); Decreases the expression levels of pRb and p16(INK4A) proteins; Prevents loss of telomerase activity resulting from repeated proliferation.

To investigate expression levels of pRb and p16(INK4A) proteins in human oral keratinocytes (NHOK) that were exposed to all trans retinoic acid, Western blot analysis Min B.M. et al., Int. J. Oncol., 1995, 7, 249-256 was performed using anti-mouse Rb (IFB) monoclonal antibody and anti-human p16 (C-20) polyclonal antibody. After probing with each of the respective antibodies, the membrane was stained with 1X Ponceau S stain for 10 minutes to reveal the total protein loading per lane.

Results showed that the pRb protein level of NHOK in vehicle control was similar with other population doubling level (PDL) numbers. However, in all-trans retinoic acid-treated NHOK, the amount of pRb protein was extremely low in the early culture at PDL 18 and gradually increased in the cells at high PDL numbers.

At low PDL, all-trans retinoic acid-treated NHOK had much lower pRb protein levels than the vehicle control corresponding PDL, but had higher levels according to the increase of PDL. Also, the intracellular p16(INK4A) protein level in all-trans retinoic acid-treated oral keratinocytes was significantly lower than that of the vehicle control at any given number. Thus, all-trans retinoic acid induces the in vitro life span extension of oral keratinocytes by decreasing the intracellular p16(INK4A) protein level.

The intracellular p16(INK4A) protein level confirmed from senescent cells of the all-trans retinoic acid-treated NHOK at PDL28 was similar to vehicle-treated control, but all-trans retinoic acid-treated NHOK having lower PDL had notably decreased.

This showed that all-trans retinoic acid maintains **telomerase** activity in NHOK and induces the in vitro life span extension of the human oral keratinocytes by decreasing the intracellular p16(INK4A) protein level.

- USE (I) inhibits replicative senescence of human mucosal keratinocytes (including human oral mucosal keratinocytes) and human epidermal keratinocytes (claimed).
- (I) can be used as a prophylactic or therapeutic agent for oral diseases such as trauma-caused inflammation, exelcymosis-caused inflammation, burn-caused inflammation, traumatic ulcer, and angular cheilosis, which are caused by senescence of human oral mucosal keratinocytes.

In addition (I) can inhibit against skin senescence and thus be used for a cosmetic purpose, and can be used as a prophylactic or therapeutic agent for wound-caused dermatitis and skin senescence.

Dwg.0/6

FS CPI

FA AB; DCN

MC CPI: B10-C04A; B14-C03; B14-H01B; B14-H04; B14-N05; B14-N17; B14-R01; D08-B

TECH

UPTX: 20030121

TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Inhibitor: (I) contains retinoic acid chosen from all-trans retinoic acid, 3,4-didehydroretinoic acid, and 9-cis retinoic acid. Preferably, (I) contains all-trans retinoic acid.

ABEX

UPTX: 20030121

ADMINISTRATION - (I) is administered by oral or parenteral route, and

preferably by parenteral injection in a dosage of 100-2000 (preferably 100-1000) mg/kg body weight for adults.

EXAMPLE - None given.

L25 ANSWER 4 OF 17 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN

AN 2002-454495 [48] WPIX

DNC C2002-129190

TI Regulating mammalian skin or hair cell proliferation and differentiation by administering nucleic acids encoding peptides derived from N-terminal region of human parathyroid hormone (hPTH) or hPTH-related protein.

DC B04 D16 D21

IN HOLICK, M F

PA (HOLI-I) HOLICK M F

CYC 25

PI WO 2002028420 A2 20020411 (200248)* EN 56 A61K038-29 RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR W: AU CA JP KR US

AU 2001096585 A 20020415 (200254) A61K038-29 EP 1349565 A2 20031008 (200370) EN A61K038-29

R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR
US 2004013719 A1 20040122 (200407) A61K048-00 <--

ADT WO 2002028420 A2 WO 2001-US31082 20011005; AU 2001096585 A AU 2001-96585 20011005; EP 1349565 A2 EP 2001-977469 20011005, WO 2001-US31082 20011005; US 2004013719 A1 WO 2001-US31082 20011005, US 2003-398449 20030723

FDT AU 2001096585 A Based on WO 2002028420; EP 1349565 A2 Based on WO 2002028420

PRAI US 2000-238134P 20001006; US 2003-398449 20030723

IC ICM A61K038-29; A61K048-00

CCS A61K007-06; A61K007-48; A61K009-127; A61K031-59;

A61K031-7088; A61P017-00; A61P035-00; C12N005-08; C12N015-88

ICI A61K031:59, A61K038:29; A61K038-29; A61K031:59

AB WO 200228420 A UPAB: 20020730

NOVELTY - Inhibiting proliferation or enhancing differentiation of mammalian skin or hair cell (mSHC) by administering to mSHC, a nucleic acid molecule (I) encoding a peptide (II) having 3 amino acids, has 10% sequence identity with 34 amino acid N-terminal region of human parathyroid hormone (hPTH) or hPTH-related protein (hPTHrP). Inducing proliferation

of mSHC is also performed by administering (I) to mSHC.

DETAILED DESCRIPTION - Inhibiting proliferation or enhancing differentiation of (M1)-(M2) mSHC, comprises:

- (a) administering to mSHC, (I) encoding (II), which when expressed is capable of inhibiting proliferation or enhancing differentiation in vitro of cultured Human keratinocytes, or in vivo in mouse skin by inhibiting skin cell proliferation hair cycle progression or hair cell growth; or
- (b) SHC of a mammal involves administering to the mammal, (I) and an active vitamin compound, where (II) encoded by (I) when expressed, is capable of inhibiting proliferation or enhancing differentiation in vitro of cultured human keratinocytes; or

in vivo in mouse skin by inhibiting skin cell proliferation or hair cycle progression or hair cell growth.

Inducing (M3) proliferation of mSHC involves administering to mSHC, (I) which encodes (II), which when expressed is capable of blocking the inhibition of proliferation or stimulation of differentiation in vitro of cultured human keratinocytes by PTH(1-34), 1,25-dihydroxyvitamin D3 (1,25(OH)2D3) or PTHrP (1-34), or in vivo in mouse skin by stimulating skin cell proliferation or accelerating hair cycle progression or stimulating hair cell growth.

INDEPENDENT CLAIMS are also included for the following:

- (1) a composition (C1) comprising a proliferation inhibiting or differentiation enhancing amount of (I) encoding (II), contained within a liposome (where (II), when expressed is capable of inhibiting proliferation or enhancing differentiation in vitro of cultured human keratinocytes or in vivo mouse skin by inhibiting skin cell proliferation or hair cycle progression or hair cell growth (optionally the composition comprises (I) encoding (II) and active vitamin D compound); and
- (2) a composition (C2) comprising a proliferation inducing amount of (I) encoding (II) encapsulated within liposome (where (II) when expressed is capable of blocking inhibition of proliferation or stimulation of differentiation in vitro of cultured human keratinocytes by PTH(1-34), 1,25-dihydroxyvitamin D3 (1,25(OH)2D3), or PTHrP (1-34) or in vivo in mouse skin by stimulating skin cell proliferation or accelerating hair cycle progression or stimulating hair cell growth).

ACTIVITY - Antipsoriatic; dermatological; cytostatic; vulnerary. No supporting data is given.

MECHANISM OF ACTION - Gene therapy; Inhibits proliferation or enhances differentiation of mammalian skin or hair cells, induces proliferation of mammalian skin or hair cells.

USE - (M1) and (M2) are useful for inhibiting proliferation or enhancing differentiation of mSHC or SHC of a mammal, respectively.

- (M1) is useful for inhibiting a hyperproliferative skin disorder such as psoriasis, ichthyosis, eczema, acne, actinic keratosis, or skin cancer, or for inhibiting hair growth or preventing hair regrowth.
- (M3) is useful for stimulating cell growth, rejuvenating aged skin, preventing skin wrinkles, treating skin wrinkles, enhancing wound healing, stimulating hair growth, maintaining hair growth, treating or preventing female or male pattern baldness, or treating chemotherapy induced alopecia, and also for stimulating epidermal cell growth or hair follicle cell growth (claimed).

 Dwg.0/47

FS CPI

FA AB; DCN

MC CPI: B04-C01A; B04-E03C; B04-J04B; B04-J04B0E; B04-N02; B04-N0200E; B12-M02B; B12-M02F; B12-M05; B14-H01; B14-N17; B14-N17B; B14-N17C; D05-H12A; D05-H17A2; D05-H18; D08-B03; D08-B07; D08-B09; D08-B09A1

TECH

TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Method: In (M1) or (M3), (I) is administered as a part of a phamaceutical composition comprising a carrier such as a liposome. Optionally, (I) is contained within a porous biocompatible matrix. The peptide encoded by (I) has at least 75% sequence identity with the 34 amino acid N-terminal region of hPTH or hPTHrP. (M1) further involves administering to the mSHC, an active vitamin D compound such as calcipotriene, 1,25-dihydroxyvitamin D3, 19-nor-1,25-

dihydroxyvitamin D2, or 19-nor-1,25-dihydroxyvitamin D3. The nucleic acid molecule is operably linked to a promoter, and is contained by a plasmid or a viral vector.

In (M2), (I) (encapsulated within a liposome or within a porous biocompatible matrix) and the active vitamin D compound are administered to the individual as part of single pharmaceutical composition, or as part of separate pharmaceutical compositions.

Preferred Composition: In (C1), (I) is optionally contained within a porous biocompatible matrix of at least one of the nucleic acid molecules or active vitamin D compound is encapsulated by liposomes.

ABEX

UPTX: 20020730

UPTX: 20020730

WIDER DISCLOSURE - Stimulating hair growth administering (I) encoding (II) which when expressed is capable of stimulating hair growth in vitro or in vivo.

```
SPECIFIC POLYPEPTIDES - The peptide encoded by (I) employed in (M1) is PTH
     (1-34) , PTHrP (1-34) , PTH (1-84) , PTHrP (1-141)
    PTHrP (1-139) or PTHrP (1-173) which have fully defined sequences of 34,
    35, 84, 141, 139 and 209 amino acids as given in the specification,
    respectively (claimed).
    The peptide encoded by (I) employed in (M3), is PTH (7-34), PTHrP (7-34),
    PTH (5-36), PTHrP (5-36), PTH (5-34), PTHrP (5-34), PTH (7-84), PTHrP
     (7-139), PTHrP (4-141) or PTHrP (7-173) having a fully defined sequence of
    28, 29, 32, 32, 30, 30, 78, 133, 135, or 203 amino acids as given in the
    specification, respectively (claimed).
    SPECIFIC SEQUENCES - (I) employed in (M1) or (M3) has a fully defined
    sequence of 255 (hPTH coding sequence), 252 (bovine PTH coding sequence),
     426 (hPTHrP coding sequence), 255 (rat PTHrP coding sequence) nucleotides
     as given in specification, or its fragments (claimed).
    ADMINISTRATION - In (M1), (I) is administered topically to the mSHC.
    Optionally, (I) and an active vitamin D compound are administered
     topically or parenterally.
     In (M2), (I) is administered parenterally, and the active vitamin D
     compound is administered topically or orally (claimed).
    Dosage of (I) ranges from 0.001-500 microG/kg/day. Typical daily dosages
     range from 0.01-100 microG/cm2.
    ANSWER 5 OF 17 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
     2001-582276 [65]
                       WPIX
                       DNC C2001-172698
DNN
    N2001-433780
    Novel isolated matrix metalloproteinase-25 nucleic acid molecule and
     proteins encoded by them whose inhibition is useful for modulation of hair
     growth in mammals.
     B04 D16 D21 S03
     FAJARDO, M; MOSS, P; SCHATZMAN, R C; SMITH, R; WANG, K
     (DARW-N) DARWIN MOLECULAR CORP; (FAJA-I) FAJARDO M; (MOSS-I) MOSS P;
     (SCHA-I) SCHATZMAN R C; (SMIT-I) SMITH R; (WANG-I) WANG K; (SCHA-I)
     SCHATZMAN R
    95
                   A2 20010913 (200165) * EN 119
                                                      C12N015-55
     WO 2001066766
       RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
            NL OA PT SD SE SL SZ TR TZ UG ZW
         W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
            DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ
            LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD
            SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
                     A 20010917 (200204)
                                                      C12N015-55
     AU 2001043455
                     A1 20020328 (200225)
     US 2002037827
                                                      A61K031-00
    WO 2001066766 A2 WO 2001-US7167 20010306; AU 2001043455 A AU 2001-43455
     20010306; US 2002037827 A1 Provisional US 2000-187196P 20000306, US
     2001-801196 20010306
    AU 2001043455 A Based on WO 2001066766
FDT
                                                         20010306
                          20000306; US 2001-801196
PRAI US 2000-187196P
     ICM A61K031-00; C12N015-55
         A01K067-00; A61K007-06; A61K031-713; C07H021-04;
          C07K016-40; C12N005-06; C12N005-10; C12N009-00; C12N009-64;
          C12N015-11; C12N015-62; C12P021-02; C12Q001-68; G01N033-577
     WO 200166766 A UPAB: 20011108
     NOVELTY - An isolated matrix metalloproteinase (MMP)-25 nucleic acid
     molecule (I) comprising a fully defined sequence (NS) of 833 (S1), 1488
     (S3) and 1841 (S5) nucleotides as given in specification, nucleotide
     sequence having 85% identity to NS; complements of NS, or sequences that
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L25

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PΑ

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IC

AB

hybridize to NS, is new.

PΙ

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) a MMP-25 polypeptide (II) comprising a fully defined sequence (PS) of 269 (S2), 466 (S4) or 513 (S6) amino acids as given in specification, an amino acid sequence having 90% identity to PS, amino acid sequence encoded by (I), an amino acid sequence encoded by a nucleotide sequence having 85% identity to (I) or an amino acid sequence encoded by a nucleic acid that hybridizes to (I);
- (2) an expression vector (III) comprising (I) operably linked to a expression control sequence;
 - (3) a host cell transformed or transfected with (III);
 - (4) preparation of (II);
 - (5) an antibody (IV) that binds to (II);
 - (6) a hybridoma which produces (IV);
 - (7) a fusion protein comprising (II);
 - (8) a ribozyme that cleaves RNA encoding (II);
- (9) an antisense nucleic acid molecule comprising a sequence that is antisense to (I);
- (10) inhibiting (M1) catalytic activity of (II) by administering an agent to the cell that inhibits catalytic activity of the polypeptide, provided that the agent inhibits the catalytic activity of the polypeptide to a greater extent than it inhibits the activity of at least one non-type 25 MMP:
- (11) inhibiting (M2) expression of (II), by administering to the cell, a vector comprising a nucleic acid molecule which contains a sequence that inhibits expression of (II); and
- (12) modulating hair growth in a mammal by applying a composition comprising an inhibitor of MMP provided that the applied composition reduces the catalytic activity of type 25 MMP to a greater extent than it reduces the catalytic activity of a non-type 25 MMP.

ACTIVITY - None given.

MECHANISM OF ACTION - MMP activity or expression inhibitor; hair growth modulator; antisense therapy.

Tests are described but no results given.

- USE (I) is useful for identifying a nucleic acid molecule encoding all or part of MMP by hybridizing (I) to a nucleic acid sample and identifying a sequence that hybridizes in the nucleic acid sample. The identification step involves performing polymerase chain reaction (PCR) to amplify the hybridizing sequence.
- (IV) is useful for identifying a type 25 MMP which involves incubating (IV) with a sample containing a protein under conditions which allow the binding of (IV) to the type 25 MMP present in the sample, whereby the binding of the antibody identifies the type 25 MMP.

Furthermore, inhibitors of (II) may be used to modulate hair growth in a mammal (claimed).

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Dwg.0/5
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FS CPI EPI

FA AB; DCN

TECH

MC CPI: B04-C01G; B04-E03E; B04-E06; B04-E07; B04-E08; B04-F0100E; B04-F05; B04-F11; B04-G03; B04-G21; B04-L05C; B04-M01; B11-C08E; B11-C08E5; B12-K04E; B12-K04F; D05-H09; D05-H11A1; D05-H12A; D05-H12D2; D05-H12D4; D05-H12E; D05-H14; D05-H15; D05-H17A3; D05-H17C; D05-H18B; D08-B03

EPI: S03-E14H4

UPTX: 20011108

TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preparation: (II) is prepared by standard recombinant techniques (claimed).

Preferred Polypeptide: (II) has a first MMP zinc-binding domain and lacks the second MMP zinc-binding domain. It exhibits or lacks catalytic activity of MMP.

Preferred Vector: (III) is a plasmid vector, phage vector, herpes simplex viral vector, adenoviral vector, adenovirus-associated viral vector, or retroviral vector.

Preferred Antibody: (IV) is a monoclonal antibody.

Preferred Method: In (M2), a nucleic acid molecule which contains the sequence that inhibits expression of (II), encodes a non-functional variant of MMP which has:

- (i) an amino acid sequence as described above, or
- (ii) a polypeptide comprising first MMP zinc-binding domain with the proviso that the polypeptide lacks a second MMP Zn-binding domain, or (iii) an amino acid sequence encoded by a nucleic acid molecule that hybridizes under conditions of high stringency to (I).

Preferably, the nucleic acid molecule encodes a ribozyme that cleaves RNA encoding MMP-25 polypeptide or contains a sequence that is antisense to a portion of RNA encoding MMP-25 polypeptide.

ABEX

UPTX: 20011108

WIDER DISCLOSURE - Also disclosed as new are the following:

- (1) nucleic acid fragment or oligonucleotide encoding at least 8 contiguous amino acids of PS;
- (2) vectors comprising the antisense molecules or ribozymes and host cells comprising these vectors;
- (3) a nucleic acid molecule comprising a sequence that encodes a peptide of 27 amino acids in length, where the peptide is a consensus sequence for a Zn-binding domain of MMP; and
- (4) identifying a nucleic acid encoding all or part of MMP by identifying a sequence encoded by the above mentioned consensus sequence and cloning a sequence containing the identified sequence from a cDNA library.

ADMINISTRATION - Administration is topical.

Dosages is 10-3000 microg/cm2.

EXAMPLE - A first matrix metalloproteinase (MMP-25(1)) was identified. The polynucleotide encodes a protein comprising the conserved peptide sequences LVAAHELGHXLGLXHSXXXXAXMSSSY and HGDXXPFDGXXXXLAHAFXPGXGXGGDXHPDX GEXWT. These conserved peptide sequences represent a consensus for MMP polypeptides as determined by aligning protein sequences of several MMP family members using a multiple sequence alignment program. The first MMP sequence identified comprises 833 bp. To obtain a full-length cDNA sequence for the novel MMP, a mammary gland cDNA expression library was screened by amplification using rapid amplification of cDNA ends (RACE) reactions with unique sequence primers deduced from the 833 bp sequence in combination with primers that bind to 5' and 3' vector sequences adjacent to the ends of cloned inserts. The vector primer AP1 was used with one of the following primers from the candidate 833 bp sequence to amplify the 5' sequences, TGATATCATAATAGATCCTCCATAGGTGCC and

TTCCTTAGGCAGACCTCCATAGATGGACTGG. The vector primer AP2 was used with one of the following primers from the candidate 833 bp sequence to amplify the 3' sequences, CCTAAGGAACCTGCTAAGCCAAAGGAA and CCGCAGAGAAGTAATGTTCTTTAAA. Using the above method, a novel sequence of 1833 bp in length with an open reading frame of 1530 bp was identified. A second novel metalloproteinase sequence (MMP-23(s)) was also identified by cDNA library screening using RACE reactions. The nucleotide sequence encoding MMP-25(s) has a fully defined sequence of 1488 nucleotides and encodes a polypeptide having a fully defined sequence 466 amino acids as given in specification. The nucleotide sequence of MMP-25(s) was identical to the sequence for MMP-25(1) except in having a deletion of 129 nucleotides corresponding to 43 amino acids. The deleted sequence in the shorter version of MMP-25 was unique among metalloproteinases: while the encoded protein contains the first Zn-binding domain, it lacks the second Zn/Ca-binding domain typical for other members of the matrix metalloproteinase family. In situ hybridization results revealed that MMP-25 was expressed in the inner root

sheath layer of the hair follicle. The cell layer within the inner root sheath, the Henle layer was further defined as a particular cell type for MMP25 mRNA expression in skin. The particular localization of MMP-25 expression in inner root sheath of hair follicles indicates that control of the expression of the MMP-25 sub-family of metalloproteinases was involved in the regulation of hair growth. Chromosomal location for human MMP-25 showed that it maps to chromosome 11q22, a region where several other MMPs including MMP1, MMP3, MMP7, MMP8, MMP10, MMP12 and MMP13, have been previously mapped.

```
ANSWER 6 OF 17 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
L25
     2001-229036 [24] WPIX
AN
DNC C2001-068633
    Hair growth inhibitor useful as external preparation for inhibiting hair
TI
     growth on legs and under armpits contains neutral endopeptidase inhibitor
     as active ingredient.
DC
     B05 D21
     (KAOS) KAO CORP
PΑ
CYC 1
                                                8 A61K007-06
PΙ
     JP 2000351716 A 20001219 (200124)*
     JP 2000351716 A JP 1999-271970 19990927
ADT
                          19990405
PRAI JP 1999-97504
     ICM A61K007-06
     ICS A61K045-00; A61P043-00
    A61K031-19; A61K031-215
     JP2000351716 A UPAB: 20010502
     NOVELTY - Hair growth inhibitor contains neutral endopeptidase inhibitor
     as active ingredient.
          USE - As external preparation for inhibiting hair growth e.g. on legs
     and under armpits so avoiding physical depilation and shaving.
          Hair growth inhibition effect of a compound of formula (Ia) was
     evaluated in five 6 week old C3H mice. 100 micro 1 of the sample dissolved
     in 80 % ethanol was applied for 4 weeks and a control mouse was applied
     with 80 % ethanol alone. The hair growth inhibition was found to be
     excellent.
     Dwq.0/0
     CPI
FS
FΑ
     AB; GI; DCN
     CPI: B10-D03; B14-D07C; B14-R01; D08-B07
MC
                    UPTX: 20010502
TECH
     TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred Inhibitor: 7 neutral
     endopeptidase inhibitor are disclosed, especially malonamide derivative of
     formula (I) is used.
        = H, alkyl, alkenyl or aralkyl;
= H or optionally substituted alkyl, alkenyl or aralkyl;
        = heterocyclic ring having NH group, alkyl, alkenyl or joined to R4;
     R4 = H or substituted alkyl, alkenyl, aralkyl or joined to R3;
     R5 = OH, alkoxy, alkenyloxy, or amino acid residue; and
     n = 0-5.
     ANSWER 7 OF 17 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
     2000-545818 [50] WPIX
AN
DNC C2000-162757
     Hair growth inhibitor comprises steroids, specific roots, tomato and hair
ΤI
     growth inhibitor containing extract obtained from specific crude drug.
DC
     B01 B04 D21 E15
     (LIOY) LION CORP
PΑ
CYC
                                                      A61K007-06
     JP 2000191459 A 20000711 (200050)*
PΙ
     JP 2000191459 A JP 1998-369605 19981225
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ADT

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19981225
PRAI JP 1998-369605
     ICM A61K007-06
     ICS A61K031-566; A61K031-57; A61K035-78; A61P043-00
     JP2000191459 A UPAB: 20001010
AB
     NOVELTY - Hair growth inhibitor comprises steroids such as cyproterone, 5
     alpha -androstene-3 alpha ,17 beta -diol, medoroxyprogesterone,
     norethisterone, mestanolone and/or derivatives, Scutellaria root,
     Lithospermum root, tomato and a hair growth inhibitor containing extract
     obtained from a crude drug such as Hedera helex.
          DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a
     cosmetic containing the hair growth inhibitor.
          USE - Used as a hair growth inhibitor.
          ADVANTAGE - The inhibitor has excellent inhibition of hair growth.
          A test was performed to observe the hair growth inhibitory effect. A
     steroid was dissolved in a solvent to obtain a concentration of 0.5
     weight% of sample. Hair of a mouse of 49 days old was depleted without
     damaging the skin. The mouse was applied with 0.1 ml of sample, once daily
     for two days. A control was simultaneously prepared by applying the
     solvent alone. The amount of hair growth was computed by comparing with
     the control. An excellent hair growth inhibitory effect was observed.
     Dwq.0/0
     CPI
FS
FΑ
     AB; DCN
     CPI: B01-C05; B01-D02; B04-A08C2; B04-A09D; B04-A10; B04-A10F;
MC
          D08-B03; E01
ABEX
                    UPTX: 20001010
     EXAMPLE - A hair growth inhibition cream was prepared by using (in weight%)
     Cyproterone acetate (0.05), stearic acid (2), hydrogenated lanolin (4),
     squalane (9), octyl dodecanol (10), 1,3-butylene glycol (4), glycerol (3),
     polyoxyethylene (POE) (25), cetyl ethyl (3), glyceryl monostearate (2),
     ethylparaben (0.1), butylparaben (0.1) and purified water (remaining) to
     obtain a cream (100).
     ANSWER 8 OF 17 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
     1997-448705 [41]
AN
                       WPIX
DNC
     C1997-143119
     Removing hair from selected skin area giving longer lasting result - by
TI
     applying liposome containing photosensitiser, removing liposome and
     applying light to cause photosensitiser to damage hair follicles.
DC
     B02 D21 E19
     BEN-HUR, E; CHAN, W; ZUK, M M
IN
     (NYBL-N) NEW YORK BLOOD CENT INC; (NEWB-N) NEW BLOOD CENT INC
PA
CYC
     72
                     A1 19970904 (199741)* EN 19
                                                      C14C001-06
PΤ
     WO 9732046
        RW: AT BE CH DE DK EA ES FI FR GB GR IE IT KE LS LU MC MW NL OA PT SD
            SE SZ UG
         W: AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IL
            IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL
            PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN
                     A 19970916 (199803)
                                                      C14C001-06
     AU 9721359
                     A1 19981216 (199903)
                                                      C14C001-06
                                           EN
     EP 883695
         R: AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
                   W 20000523 (200033)
                                                      A61K007-155
     JP 2000506140
                                                17
                     A 20001107 (200059)
                                                      A61K007-06
     US 6143287
                     B1 20010606 (200133)
                                                      C14C001-06
     EP 883695
                                           EN
         R: AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
                                                      C14C001-06
                     E 20010712 (200147)
     DE 69705111
                     B1 20020402 (200226)
     US 6365145
                                                      A61K007-06
     WO 9732046 A1 WO 1997-US2851 19970224; AU 9721359 A AU 1997-21359
ADT
     19970224; EP 883695 A1 EP 1997-906751 19970224, WO 1997-US2851 19970224;
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JP 2000506140 W JP 1997-531047 19970224, WO 1997-US2851 19970224; US
     6143287 A US 1996-607526 19960227; EP 883695 B1 EP 1997-906751 19970224,
     WO 1997-US2851 19970224; DE 69705111 E DE 1997-605111 19970224, EP
     1997-906751 19970224, WO 1997-US2851 19970224; US 6365145 B1 Cont of US
     1996-607526 19960227, US 2000-587406 20000605
FDT AU 9721359 A Based on WO 9732046; EP 883695 Al Based on WO 9732046; JP
     2000506140 W Based on WO 9732046; EP 883695 B1 Based on WO 9732046; DE
     69705111 E Based on EP 883695, Based on WO 9732046; US 6365145 B1 Cont of
     US 6143287
PRAI US 1996-607526
                          19960227; US 2000-587406
                                                         20000605
    US 5198470; US 5277913
REP
     ICM A61K007-06; A61K007-155; C14C001-06
IC
         A61K007-15; A61K009-127; A61K045-00; A61P017-00
AΒ
          9732046 A UPAB: 19971013
     A method for removing hair from a selected area of skin comprises: (a)
     applying a liposome composition comprising a photosensitiser to the
     selected skin area so that the composition is introduced into the hair
     follicle ducts of the skin area. The photosensitiser is present in an
     amount effective to undergo a reaction and damage the hair follicles upon
     application to the skin area of light of appropriate wave length, energy
     and duration to penetrate the skin and activate the photosensitiser; (b)
     removing from the skin area substantially all the liposome composition
     which is not introduced into the follicle ducts; and (c) applying the
     light to the skin area to penetrate the skin and cause the photosensitiser
     to undergo reaction and damage the hair follicles.
          Also claimed is the liposome composition used in the method.
          USE - The composition and the method are useful for removing hair
     from areas of skin, such as mustache, from hands and legs etc.
          ADVANTAGE - The method is not time consuming, painful and damaging to
     the skin. The method results in hair removal which is long lasting, and
     more permanent than conventional methods.
    Dwq.0/6
FS
    CPI
FA
    AB; DCN
     CPI: B04-B01B; B05-A01B; B05-A02; B05-B01P; B06-D18; B12-M11F;
MC
          D08-B07; E22-C02; E23; E25-E02
    ANSWER 9 OF 17 WPIX COPYRIGHT 2004 THOMSON DERWENT ON STN
L25
AN
     1997-310350 [28]
                        WPIX
DNC
    C1997-099806
    Reducing mammalian hair growth - by suppression of conversion of glucose
TI
     to acetyl coenzyme A, especially for treatment of hirsutism in women.
DC
     B05 D21 E19
    AHLUWALIA, G; HENRY, J; SHANDER, D
IN
PA
     (GILL) GILLETTE CO; (HAND-I) HANDELMAN J H; (AHLU-I) AHLUWALIA G; (HENR-I)
    HENRY J; (SHAN-I) SHANDER D
CYC
    76
ΡI
    WO 9719673
                     A2 19970605 (199728)* EN
                                                17
                                                      A61K007-06
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           HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX
           NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG US UZ VN
     US 5652273
                     Α
                        19970729 (199736)
                                                 6
                                                      A61K031-13
                        19970827 (199740)
     ZA 9609781
                     A
                                                17
                                                      A61K000-00
    AU 9710865
                        19970619 (199741)
                                                      A61K007-06
                     Α
    WO 9719673
                     A3 19971002 (199814)
                                                      A61K007-06
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    EP 863741
                     A2 19980916 (199841)
                                          EN
                                                      A61K007-06
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    US 5824665
                    A 19981020 (199849)
                                                      A61K031-13
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BR 9611756
                  19990406 (199920)
                                                 A61K007-06
                                                                 <---
                Α
                   20000202 (200017)
JP 2000501098
                W
                                           21
                                                 A61K007-06
                                                                 <--
MX 9804296
               A1 19980901 (200017)
                                                 A61K007-06
                                                                 <--
AU 728886
               B 20010118 (200109)
                                                 A61K007-06
                                                                 <--
               B1 20010417 (200123)
US 6218435
                                                 A61K031-13
CA 2237780
                C 20020129 (200211)
                                      EN
                                                 A61K007-06
               B 20010613 (200235)
MX 202316
                                                 A61K031-13
EP 1352627
               A2 20031015 (200368)
                                     EN
                                                 A61K007-06
    R: AT BE CH DE DK ES FI FR GB GR IE IT LI LU NL PT SE
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ADT WO 9719673 A2 WO 1996-US19102 19961125; US 5652273 A US 1995-565728 19951130; ZA 9609781 A ZA 1996-9781 19961121; AU 9710865 A AU 1997-10865 19961125; WO 9719673 A3 WO 1996-US19102 19961125; EP 863741 A2 EP 1996-940921 19961125, WO 1996-US19102 19961125; US 5824665 A Div ex US 1995-565728 19951130, US 1997-842054 19970423; BR 9611756 A BR 1996-11756 19961125, WO 1996-US19102 19961125; JP 2000501098 W WO 1996-US19102 19961125, JP 1997-520706 19961125; MX 9804296 A1 MX 1998-4296 19980529; AU 728886 B AU 1997-10865 19961125; US 6218435 B1 Div ex US 1995-565728 19951130, Div ex US 1997-842054 19970423, US 1998-118946 19980717; CA 2237780 C CA 1996-2237780 19961125, WO 1996-US19102 19961125; MX 202316 B MX 1998-4296 19980529; EP 1352627 A2 Div ex EP 1996-940921 19961125, EP 2003-10707 19961125

FDT AU 9710865 A Based on WO 9719673; EP 863741 A2 Based on WO 9719673; US 5824665 A Div ex US 5652273; BR 9611756 A Based on WO 9719673; JP 2000501098 W Based on WO 9719673; AU 728886 B Previous Publ. AU 9710865, Based on WO 9719673; US 6218435 B1 Div ex US 5652273, Div ex US 5824665; CA 2237780 C Based on WO 9719673; EP 1352627 A2 Div ex EP 863741

PRAI US 1995-565728

19951130; US 1997-842054 19970423;

US 1998-118946 19980717

REP EP 711541; WO 9104058

IC ICM A61K000-00; A61K007-06; A61K031-13

ICS A61K031-191; A61K031-275; A61K031-35; A61K031-47; A61K031-661; A61K031-70; A61K031-7008; A61K045-00; A61P017-00

AB WO 9719673 A UPAB: 19970709

Reducing mammalian hair growth comprises: (a) selecting an area of skin from which reduced hair growth is desired, and (b) applying a dermatologically acceptable composition comprising a suppressor of the metabolic pathway for the conversion of glucose to acetyl-CoA to reduce hair growth.

Also claimed is a composition for use for the reduction and inhibition of hair growth which comprises a suppressor of the metabolic pathway for the conversion of glucose to acetyl-CoA and a non-toxic vehicle or carrier.

The suppressor is: (a) an inhibitor of hexokinase selected from 6-amino-6-deoxy-glucose, N-acetyl- beta -D-mannosamine, D-mannosamine or N- alpha -(p-tosyl)-L-lysine chloromethyl ketone; (b) an inhibitor of phosphofructokinase selected from phosphoglycerate, quinone methide (taxodone or taxodione), alpha -methylene lactone (euparotin acetate, eupacunin or vernolepin), agaric acid, quinaldic acid, 5'-p-fluorosulphonyl benzoyl adenosine; and (c) an inhibitor of aldose selected from 5-keto-D-fructose and 5-keto-D-fructose- 1,6-bisphosphate.

USE - The composition can be used on the face of a human, preferably of a woman suffering from hirsutism (claimed). The composition can be applied to the cheek, neck, upper lip, chin, legs, arms, torso or armpits at least twice/day for at least 3 months to achieve a perceived reduction in hair growth. The composition should be applied at 10-3000 mu g/cm2 skin.

Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: B04-B03A; B05-B01P; B07-A02; B10-A06; B14-D02A;

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D08-B07; E07-A02; E07-A02F; E07-A02H
ABEQ US 5652273 A UPAB: 19970909
     Reducing mammalian hair growth comprises
         selecting an area of skin from which reduced hair growth is desired;
     and applying to the area of skin a dermatologically acceptable composition
     comprising an inhibitor of hexokinase in an amount effective to reduce
     hair growth.
     Dwq.0/1
     ANSWER 10 OF 17 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
     1995-328081 [42] WPIX
AN
     C1995-145519
DNC
     Inhibiting hair growth in mammals - using ornithine amino transferase
ΤI
     inhibitor, especially for cosmetic inhibition of facial hair.
DC
     B05 D16 E14 E16
     THOMPSON, L W; WALLACE, H M; WISLER, M M; WU, J; FUNKHOUSER, M G; SHANDER,
IN
     (BAKO) BAKER HUGHES INC; (HAND-I) HANDELMAN J H; (FUNK-I) FUNKHOUSER M G;
PA
     (SHAN-I) SHANDER D
CYC
     65
                     A1 19950914 (199542)* EN
                                                15
                                                      A61K007-06
PΙ
     WO 9524181
        RW: AT BE CH DE DK ES FR GB GR IE IT KE LU MC MW NL OA PT SD SE SZ UG
         W: AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU JP KE KG
            KP KR KZ LK LR LT LU LV MD MG MN MW MX NL NO NZ PL PT RO RU SD SE
            SG SI SK TJ TM TT UA UG US UZ VN
                    A 19950925 (199601)
     AU 9521172
                                                      A61K007-06
                                                      A61K007-06
                     A 19951212 (199604)
                                                 3
                                                                     <--
     US 5474763
                     A 19960228 (199614)
                                                      A61K000-00
     ZA 9502031
                                                13
                    A1 19970122 (199709)
                                         EN
                                                      A61K007-06
     EP 754024
         R: AT BE CH DE DK ES FR GB GR IE IT LI LU NL PT SE
     JP 09510210
                    W 19971014 (199751)
                                                13
                                                      A61K007-06
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                                                      A61K007-06
     MX 9603923
                     B1 19981028 (199847) EN
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     AU 696879
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     ES 2122570
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     CA 2184170
                     C
                     B 20000111 (200115)
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     MX 194862
     WO 9524181 A1 WO 1995-US2915 19950308; AU 9521172 A AU 1995-21172
ADT
     19950308; US 5474763 A US 1994-212012 19940311; ZA 9502031 A ZA 1995-2031
     19950310; EP 754024 A1 EP 1995-913991 19950308, WO 1995-US2915 19950308;
     JP 09510210 W JP 1995-523629 19950308, WO 1995-US2915 19950308; MX 9603923
     A1 MX 1996-3923 19960906; EP 754024 B1 EP 1995-913991 19950308, WO
     1995-US2915 19950308; AU 696879 B AU 1995-21172 19950308; DE 69505651 E DE
     1995-605651 19950308, EP 1995-913991 19950308, WO 1995-US2915 19950308; ES
     2122570 T3 EP 1995-913991 19950308; CA 2184170 C CA 1995-2184170 19950308,
     WO 1995-US2915 19950308; MX 194862 B MX 1996-3923 19960906
FDT AU 9521172 A Based on WO 9524181; EP 754024 A1 Based on WO 9524181; JP
     09510210 W Based on WO 9524181; EP 754024 B1 Based on WO 9524181; AU
     696879 B Previous Publ. AU 9521172, Based on WO 9524181; DE 69505651 E
     Based on EP 754024, Based on WO 9524181; ES 2122570 T3 Based on EP 754024;
     CA 2184170 C Based on WO 9524181
                         19940311; US 1994-212194
                                                         19940311;
PRAI US 1994-212012
                          19940314; US 1994-212269
                                                         19940314;
     US 1994-212257
                         19940314; US 1994-214916
                                                         19940314
     US 1994-214343
     WO 8602269; WO 9421216; WO 9421217
REP
     ICM A61K000-00; A61K007-006; A61K007-06
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ICS A61K007-15; A61K007-155; A61K031-19

9524181 A UPAB: 19951026

AB

WO

Mammalian hair growth is inhibited by applying to a selected area of the skin a compsn. containing an inhibitor (I) of ornithine aminotransferase (OAT).

Also new are compsns. containing (I) and a dermatological vehicle or carrier. Compsns. are partic. used in cosmetics to inhibit hair growth on the face. (I) partic. inhibit androgen stimulates hair growth, e.g. in cases of female hirsutism.

(I) is pref. 6-fluoro-2,5-diamino hexanoic acid; (S)-2-amino-4-amino oxy-butyric acid or 3-amino-2,3-dihydro benzoic acid (which are irreversible inhibitors).

These contain 1-30% (I) plus a spreadable vehicle or carrier. (I) is applied at 100-3000 mug/cm2 of skin, typically once or twice a day for at least 3 months. The treatment causes a reduction in growth of at least 30 (best at least 70)% in the Golden Syrian hamster assay.

Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: B04-C03B; B10-A11B; B10-A18; B10-B01B; B10-B02E; B10-E04B; B10-E04C; B12-M02F; B14-D02; B14-D06; B14-N17; D05-C03; D08-B03; E10-B01C; E10-B02A

ABEO US 5474763 A UPAB: 19960129

A method of reducing mammalian hair growth which comprises selecting an area of skin of a mammal from which hair is growing and

from which reduced hair growth is desired; and

applying to said area of skin of a mammal from which hair is growing and from which reduced hair growth is desired an inhibitor of ornithine amino-transferase in an amount effective to reduce hair growth.

Dwg.0/0

L25 ANSWER 11 OF 17 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN

AN 1993-167280 [20] WPIX

CR 1995-350220 [45]

DNC C1993-074552

TI Reduction of hair growth and altering character - by topical application of L-asparagine synthetase inhibitor e.g. guanidino-succinic acid.

DC B05 **D21** E19 P14

IN AHLUWALIA, G S; HANDELMAN, J H

PA (HAND-I) HANDELMAN J H; (GILL) GILLETTE CO

CYC 39

PΙ

A1 19930513 (199320) * EN A01N037-10 RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NI, OA SE W: AT AU BB BG BR CA CH CO DD ---JP KP KR LK LU MG MN MW NL NO PL RO RU SI A 19930 A01N037-10 AU 9230627 A01N037-10 A1 19940 EP 612211 plicant R: AT BE CH DE DK ES W 19950! A61K031-19 JP 07504646 A01N037-10 EP 612211 A4 19941: A61K031-19 199607 AU 670554 В A61K007-06 C 199712 CA 2122002 B1 200206 A01N037-10 EP 612211 R: AT BE CH DE DK ES ... TE IT LI NL SE

ADT WO 9308687 A1 WO 1992-US9438 19921104; AU 9230627 A AU 1992-30627
19921104; EP 612211 A1 EP 1992-924244 19921104, WO 1992-US9438 19921104;
JP 07504646 W WO 1992-US9438 19921104, JP 1993-508679 19921104; EP 612211
A4 EP 1992-924244 ; AU 670554 B AU 1992-30627 19921104; CA 2122002
C CA 1992-2122002 19921104; EP 612211 B1 EP 1992-924244 19921104, WO
1992-US9438 19921104; DE 69232628 E DE 1992-632628 19921104, EP

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1992-924244 19921104, WO 1992-US9438 19921104; ES 2173874 T3 EP
    1992-924244 19921104
    AU 9230627 A Based on WO 9308687; EP 612211 A1 Based on WO 9308687; JP
FDT
    07504646 W Based on WO 9308687; AU 670554 B Previous Publ. AU 9230627,
    Based on WO 9308687; EP 612211 B1 Based on WO 9308687; DE 69232628 E Based
    on EP 612211, Based on WO 9308687; ES 2173874 T3 Based on EP 612211
PRAI US 1991-788168
                          19911105
    US 4435419; 2.Jnl.Ref
REP
    ICM A01N037-10; A61K007-06; A61K031-19
TC
         A01K067-00; A01N037-12; A61K031-195
          9308687 A UPAB: 20021209
AΒ
    Reduction of rate and altering character of mammalian hair growth, comprising
     application of a compsn. containing an organic inhibitor of L-aspargine
     synthetase, is new.
          Inhibitors are pref. guandinosuccinic acid, oxaloacetic acid,
     cysteinesulphinic acid, diethyl aminomalonate, or ethacrynic acid.
          USE - The inhibitor is non-irritant, as inorganic materials are. It
     affects partic. androgen stimulated hair growth. Compsns. comprise 0.1-30%
     inhibitor and opt. a penetration enhancer, and the application rate is
     10-7500 mcg/sq.cm. of skin
     Dwg.0/0
    Dwg.0/0
     CPI GMPI
FS
    AB; DCN
FA
     CPI: B10-A17; B12-G01B6; B12-L05; D08-B03; E10-A09C; E10-A17; E10-B02D5;
MC
          E10-C02F; E10-C03
    ANSWER 12 OF 17 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
L25
     1993-153849 [19]
                        WPIX
AN
DNC
    C1993-068623
TI
     Topical compsn. for reducing, retarding or eliminating hair growth -
     comprising inhibitor of glutamine metabolism in mammalian skin or hair and
     cosmetically acceptable vehicle.
     B05 D21 E19 E37
DC
     KEALEY, T; WESTGATE, G E; WILLIAMS, R; KEALEY, G T E; KEALEY, G T; KEALY,
IN
     GTE
     (UNIL) UNILEVER PLC; (UNIL) UNILEVER NV; (UNIL) UNILEVER LTD; (CHEO)
PA
     CHESEBROUGH PONDS USA CO
CYC
     24
                     A2 19930317 (199319)* EN
                                                19
                                                      A61K007-48
PI
     EP 532219
         R: AT BE CH DE DK ES FR GB GR IE IT LI NL PT SE
                                                      A61K007-155
     AU 9222119
                     A 19930311 (199319)
                        19930406 (199319)
                                                      A61K007-155
     BR 9203450
                     Α
                     Α
                        19930305 (199320)
                                                      A61K007-06
     CA 2077144
                     Α
     JP 05194163
                        19930803 (199335)
                                                15
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                     Α
                        19940211 (199414)
     TW 221027
                                                      A61K031-19
                     A 19940525 (199423)
                                                45
                                                      A61K000-00
     ZA 9206719
                     A 19950103 (199507)
     US 5378455
                                                11
                                                      A61K007-06
                     A3 19931118 (199512)
                                                      A61K007-48
     EP 532219
                     B 19960201 (199612)
                                                      A61K007-155
     AU 666123
                     B1 19960508 (199623)
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     EP 532219
         R: AT BE CH DE DK ES FR GB GR IE IT LI NL PT SE
                    E 19960613 (199629)
     DE 69210515
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                     B2 19960821 (199638)
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     PH 31037
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    EP 532219 A2 EP 1992-307961 19920902; AU 9222119 A AU 1992-22119 19920904;
ADT
     BR 9203450 A BR 1992-3450 19920903; CA 2077144 A CA 1992-2077144 19920828;
     JP 05194163 A JP 1992-233880 19920901; TW 221027 A TW 1992-108349
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19921020; ZA 9206719 A ZA 1992-6719 19920904; US 5378455 A Cont of US 1992-937795 19920828, US 1993-173261 19931227; EP 532219 A3 EP 1992-307961 19920902; AU 666123 B AU 1992-22119 19920904; EP 532219 B1 EP 1992-307961 19920902; DE 69210515 E DE 1992-610515 19920902, EP 1992-307961 19920902; JP 2525315 B2 JP 1992-233880 19920901; CA 2077144 C CA 1992-2077144 19920828; KR 9615950 B1 KR 1992-16069 19920904; PH 31037 A PH 1992-44878 19920831

FDT AU 666123 B Previous Publ. AU 9222119; DE 69210515 E Based on EP 532219; JP 2525315 B2 Previous Publ. JP 05194163

PRAI GB 1991-18866 19910904

REP No-SR. Pub; WO 8602269; WO 8808295

ICS A61K007-16

AB EP 532219 A UPAB: 19970502

Compsn. suitable for topical application to mammalian skin for reducing, retarding or eliminating hair growth. The compsn comprises: (a) an effective amount of an inhibitor of glutamine metabolism in mammalian skin or hair; and (b) a cosmetically acceptable vehicle for the inhibitor. The inhibitor is an agent for inhibiting at least one enzyme involved in the conversion of glutamine to lactate in mammalian skin or hair.

USE - Compsns. may be used: either to prevent or retard regrowth after hair removal by a conventional method; or to reduce the rate of hair growth, e.g. in a beard, without consequential hair loss.

Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: B05-A03A; B05-A03B; B07-A01; B10-C02; B10-C04E; B12-G01B1; B12-G01B3; B12-L05; **D08-B07**; E05-L03B; E07-A01; E10-A16; E10-C02D; E10-C02F; E35-N

ABEQ US 5378455 A UPAB: 19950223

Topical compsn. for application to mammalian skin comprises: (a) an inhibitor of glutamine metabolism where one or more enzymes involves in conversion of glutamine to lactate are present; and (b) a cosmetic vehicle. (a) comprises glutamine, glutamate dehydrogenase, alpha-ketoglutarate decarboxylase, succinyl CoA synthetase, succinate dehydrogenase, fumarase, malate dehydrogenase and/or malic enzyme.

USE - Used for reducing, retarding or eliminating hair growth by topical application of a water-in-oil emulsion. Dwg.0/1

ABEO EP 532219 B UPAB: 19960610

A cosmetic method for reducing, retarding or eliminating mammalian hair growth, which comprises topically applying to the skin a composition comprising: (i) an effective amount of an inhibitor of glutamine metabolism in mammalian skin or hair; and (ii) a cosmetically acceptable vehicle for the inhibitor.

Dwg.0/1

L25 ANSWER 13 OF 17 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN

AN 1992-096580 [12] WPIX

DNC C1992-044798

TI Reduction of mammalian hair growth rate - by topical application of S-adenosyl methionine decarboxylase inhibitor and opt. ornithine decarboxylase inhibitor, and compsn. containing these.

DC B02 B05

IN AHLUWALIA, G S; HARRINGTON, E F; SHANDER, D; HANDELMAN, J H; HARRINGTON, F E

PA (HAND-I) HANDELMAN J H; (GILL) GILLETTE CO; (SHAN-I) SHANDER D

CYC 33

PI WO 9203140 A 19920305 (199212)* 11

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RW: AT CH DE ES GB GR LU NL SE
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                       19920317 (199226)
                                                      A61K031-70
    AU 9187232
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                    A 19920721 (199232)
    US 5132293
                                                      A61K031-70
                    A1 19930602 (199322) EN
                                                      A61K031-70
    EP 543949
        R: AT BE CH DE DK ES FR GB GR IT LI LU NL SE
                    W 19940113 (199407)
                                                 6
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    JP 06500335
                    B 19950323 (199519)
                                                      A61K031-70
    AU 657710
                    A4 19930804 (199527)
    EP 543949
                    B1 19971022 (199747)
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    EP 543949
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    DE 69128034
                    T3 19980201 (199811)
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    ES 2109949
     CA 2088909
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                     C
                    B2 20020708 (200247)
                                                 5
                                                      A61K007-155
     JP 3299961
    WO 9203140 A WO 1991-US5721 19910812; AU 9187232 A AU 1991-87232 19910812,
ADT
    WO 1991-US5721 19910812; US 5132293 A Cont of US 1990-567018 19900814, US
     1991-784650 19911028; EP 543949 A1 EP 1991-918121 19910812, WO 1991-US5721
     19910812; JP 06500335 W JP 1991-516613 19910812, WO 1991-US5721 19910812;
     AU 657710 B AU 1991-87232 19910812; EP 543949 A4 EP 1991-918121
     EP 543949 B1 EP 1991-918121 19910812, WO 1991-US5721 19910812; DE 69128034
     E DE 1991-628034 19910812, EP 1991-918121 19910812, WO 1991-US5721
     19910812; ES 2109949 T3 EP 1991-918121 19910812; CA 2088909 C CA
     1991-2088909 19910812, WO 1991-US5721 19910812; JP 3299961 B2 JP
     1991-516613 19910812, WO 1991-US5721 19910812
    AU 9187232 A Based on WO 9203140; EP 543949 A1 Based on WO 9203140; JP
FDT
     06500335 W Based on WO 9203140; AU 657710 B Previous Publ. AU 9187232,
     Based on WO 9203140; EP 543949 B1 Based on WO 9203140; DE 69128034 E Based
     on EP 543949, Based on WO 9203140; ES 2109949 T3 Based on EP 543949; CA
     2088909 C Based on WO 9203140; JP 3299961 B2 Previous Publ. JP 06500335,
     Based on WO 9203140
PRAI US 1990-567018
                          19900814
    5.Jnl.Ref; US 4720489; 1.Jnl.Ref; 14Jnl.Ref
REP
IC
     ICM A61K007-155; A61K031-70
         A61K007-06; A61K031-00; A61K031-13; A61K031-15;
          A61K031-155; A61K031-16; A61K031-195
          9203140 A UPAB: 19931006
AΒ
     To reduce the rate and alter the character of mammalian hair growth there
     is applied to the skin a compsn. containing an inhibitor of S-adenosyl
     methionine decarboxylase (I) and opt. containing an ornithine decarboxylase
     inhibitor (II). A topical compsn. for this use comprises a suitable
     carrier and 0.1-50% based on the total compsn. weight of (I) and 0.1-20% of
     (II). (I) is methylglyoxal bis(guanylhydrazone), diethyl glyoxal
     bis(quanylhydrazone) or 5'-deoxy-5'-(N-methyl-N-(2-aminooxy-ethyl)
     -aminoadenosine (MAOEA). (II) is 2-difluoromethyl -ornithine (DFMO),
     alpha-ethynyl-ornithine, 6-heptyne-2,4-diamine or 2-methyl-6-heptyne-2,5-
     diamine.
          ADVANTAGE - (I) and (II) act synergistically. (I) are generally
     applied at a rate of 1-5000 micro grams per sq. cm of skin and (II) at a
     rate of 1-2000 micrograms. Relative proportions of (I) and (II) in
     combination are pref. in the weight range 1:10 to 10:1.
     0/0
     CPI
FS
FA
     AB; DCN
     CPI: B04-B03A; B10-A17; B10-B01B; B12-C09; B12-G01B4; B12-L05
MC
ABEO US
        5132293 A UPAB: 19931006
     A new process for the redn. of the rate and altering the character of hair
     growth comprises admin. to the skin of a compsn. contg. an inhibitor of
     S-adenosylmethionine decarboxylase, pref. with an ornithine decarboxylase
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inhibitor.

The former may be methylglyoxal-bis-(guanylhydrazone) or the corresp. diethylglyoxal cpd. or 5'-deoxy-5'-(N- methyl-N)-aminoadenosine and the latter may be 2-(difluoromethyl)-ornithine, alpha-ethynylornithine, 6-heptyl-2,5-diamine or 2-methyl-6-heptyne-2,5-diamine.

Pref. the former is at concn. 1-5000 and the latter 1-2000 mcg/cm2 of skin.

ADVANTAGE - The compsn. exhibits synergistic action. 0/0

543949 A UPAB: 19931115 ABEO EP

> To reduce the rate and alter the character of mammalian hair growth there is applied to the skin a compsn. contg. an inhibitor of S-adenosyl methionine decarboxylase (I) and opt. contg. an ornithine decarboxylase inhibitor (II). A topical compsn. for this use comprises a suitable carrier and 0.1-50% based on the total compsn. wt. of (I) and 0.1-20% of (II).

(I) is methylglyoxal bis(guanylhydrazone), diethyl glyoxal bis(guanylhydrazone), diethyl glyoxal bis(quanylhydrazone) or 5'-deoxy-5'-(N-methyl-N-(2-aminooxy-ethyl)-aminoadenosine (MAOEA). (II) is 2-difluoromethyl-ornithine (DFMO), alpha- ethynyl-ornithine 6-heptyne-2,4-diamine or 2-methyl-6-heptyne-2,5-diamine.

ADVANTAGE - (I) and (II) act synergistically. (I) are generally applied at a rate of 1-500 micro grams per sq.cm. of skin and (II) at a rate of 1-2000 micrograms. Relative proportions of (I) and (II) in combination are pref. in the wt. range 1:10-10:1.

543949 B UPAB: 19971125

The cosmetic process of reducing the rate and altering the character of mammalian hair growth which comprises the step of applying to the skin a composition containing an inhibitor of S-adenosylmethionine decarboxylase. Dwg.0/0

ANSWER 14 OF 17 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN L25

1986-119079 [18] AN WPTX

C1986-050768 DNC

Hair growth modification - by topical application of a material inhibiting ΤI the action of ornithine decarboxylase.

DC B01 B05 **D21**

JP 06053680

IN SHANDER, D

(HAND-I) HANDELMAN J H; (SHAN-I) SHANDER D PΑ

CYC

A 19860424 (198618) * EN 18 PΙ RW: AT BE CH DE FR GB IT LU NL SE

W: AU DK JP NO

A 19860414 (198628) ZA 8507846 A 19860502 (198630) AU 8548673 A 19861029 (198644) EP 198893 R: AT BE CH DE FR GB IT LI LU NL SE A 19860915 (198644) NO 8602339 A 19860610 (198710) CN 85108498 W 19870416 (198721) JP 62500932

A 19860613 (198722) DK 8602784 A 19880119 (198805) US 4720489

A 19891017 (198947) CA 1262335 B 19920304 (199210) EP 198893

R: AT BE CH DE FR GB IT LI LU NL SE G 19920409 (199216) DE 3585526

NZ 213805 A 19930428 (199320) DK 166801 B 19930719 (199334) B 19940411 (199418) NO 174832 B2 19940720 (199427) A61K007-06 A61K007-06 <--<--

A61K031-56 A61K045-00 PH 26283 A 19920410 (199520) A61K031-165

ADT WO 8602269 A WO 1985-US2000 19851010; ZA 8507846 A ZA 1985-7846 19851011; EP 198893 A EP 1985-905536 19851010; JP 62500932 W JP 1985-504753 19851010; US 4720489 A US 1984-661019 19841015; NZ 213805 A NZ 1985-213805 19851014; DK 166801 B WO 1985-US2000 19851010, DK 1986-2784 19860613; NO 174832 B WO 1985-US2000 19851010, NO 1986-2339 19860611; JP 06053680 B2 JP 1985-504753 19851010, WO 1985-US2000 19851010; PH 26283 A PH 1985-32920 19851011

FDT DK 166801 B Previous Publ. DK 8602784; NO 174832 B Previous Publ. NO 8602339; JP 06053680 B2 Based on JP 62500932, Based on WO 8602269

PRAI US 1984-661019 19841015

REP DE 2840144; EP 16239; SSR880629; US 4201788; US 4390532; US 4439432; US 4457925; 3.Jnl.Ref; US 4456586

IC A61K007-06; A61K031-56; A61K045-00 ICM A61K007-06; A61K031-165; A61K031-56; A61K045-00 ICS A61K031-13; A61K031-195; A61K031-565; A61K031-57; A61K037-48 ICI A61K031-13, A61K031:

AB WO 8602269 A UPAB: 19930922

A process of altering the rate and character of human hair growth comprises applying to the skin a compsn. containing a material capable of inhibiting the action of the enzyme ornithine decarboxylase (ODC). The compsn. may contain e.g. 2-(difluoromethyl)-2,5-diaminopentanoic acid; alpha-ethynyl ornithine, 6-heptyne-2,5-diamine or 2-methyl-6-heptyne diamine. Prefd. application rate of the material is 50-500 microgram/sg.cm.

The compsn. may also contain an anti-androgen material selected from 5-alpha-reductase inhibitors and cytoplasmic androgen receptor-binding agents.

USE/ADVANTAGE - The rate and character of human hair growth, including male beard hair growth, can be altered. Unwanted interference with other bodily processes can be minimised or avoided.

FS CPI

FA AB

MC CPI: B01-C04; B01-C05; B04-B04F; B04-C03D; B10-B01B; B10-B02J; B10-E04C; B12-G01A; D08-B

ABEO DE 3585526 G UPAB: 19930922

A process of altering the rate and character of human hair growth comprises applying to the skin a compsn. contg. a material capable of inhibiting the action of the enzyme ornithine decarboxylase (ODC). The compsn. may contain e.g. 2-(difluoromethyl)-2,5-diaminopentanoic acid; alpha-ethynyl ornithine, 6-heptyne-2,5-diamine or 2-methyl-6-heptyne diamine. Prefd. application rate of the material is 50-500 microgram/sq.cm.

The compsn. may also contain an anti-androgen material selected from 5-alpha-reductase inhibitors and cytoplasmic androgen receptor-binding agents.

USE/ADVANTAGE - The rate and character of human hair growth, including male beard hair growth, can be altered. Unwanted interference with other bodily processes can be minimised or avoided. ()

ABEQ EP 198893 B UPAB: 19930922

The cosmetic process of reducing the rate and altering the character of human hair growth which comprises the stop of applying to the skin a composition containing a material capable of inhibiting the action of the enzyme ornithine decarboxylase.

ABEQ US 4720489 A UPAB: 19930922

New process for redn. growth rate and altering character of human hair, esp. androgen stimulated male board growth, comprises topical admin. of ornithine decarboxylase inhibitor, opt. with anti-androgen.

Inhibitor may be 1-2000 (50-500) mcg/m2 2-(difluoromethyl)-2,5-

diaminopentanoic acid, alpha-ethynyl-ornithine, 6-heptyne-2,5-diamine or 2-methyl-6-heptyne diamine.

Antiandrogen may be 1-500 mcg/m2 (5 alpha,20-R)-4-diazo-21-hydroxy-20methyl-pregnan-3-one, (4R)-5-10-seco-19-nor-pregna-4,5-diene-3,10,20-trione, 4-androstene-3-one17-carboxylic acid and its Me ester, 17-beta-N,N-diethylcarbamoyl-9-methyl-4-aza-5-alpha-androstane-3-- one, 11-, 17- and 20-alpha-OH-progesterone, cyproterone acetate, chloromadinone acetate, 17-alpha-propyl (and allyl)testerosterone, alpha, alpha, alpha-trifluoro-2-methyl-4'-nitro-m-propionontoluidide, 6-alpha-bromo-17-beta-hydroxy -17-alpha-methyl-4-one-5-alpha-androstane-3-one, 17-beta-acetoxy-4-alpha-5-cyclo-A-homo-B-nor-4alpha--1-ene-3-one and spironolactone.

USE - Redn. of polyamine sysnthesis and cell growth and proliferation. Treatment of female hirsteism.

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ANSWER 15 OF 17 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
L25
     1985-159178 [26]
AN
                       WPTX
     1990-044777 [06]
CR
DNC
    C1985-069670
ΤI
     Topical compsn. containing anti-androgen(s) - for altering rate and character
     of androgen-stimulated hair growth.
DC
     B01 B05
     BREUER, M M; SHANDER, D; USDIN, R V; VAN, DER LEE H; KASZYNSKI, E; USDIN,
IN
     V R; KASZYNSKI, E G
     (KASZ-I) KASZYNSKI E G; (HAND-I) HANDELMAN J H; (KASZ-I) KASZYNSKY E G;
PA
     (KASZ-I) KASZUNSKI E G
CYC
     16
                    A 19850620 (198526)* EN
PΙ
     WO 8502543
                                                15
       RW: CH DE FR GB NL SE
        W: AU DK JP NO
     AU 8537458
                    A 19850626 (198536)
                    A 19850612 (198536)
     ZA 8409518
                    A 19851014 (198548)
     NO 8503143
     EP 165970
                    A 19860102 (198602)
        R: CH DE FR GB LI NL SE
                   W 19860515 (198626)
     JP 61500966
                    A 19850809 (198632)
     DK 8503630
                    A 19870110 (198806)
     CN 85101410
                    A 19890328 (198917)
     CA 1251737
                    A 19901212 (199136)#
     CN 1047620
     IT 1221006
                       19900621 (199216)
                    В
                    B1 19930303 (199309) EN
     EP 165970
                                                      A61K031-56
        R: CH DE FR GB LI NL SE
                   G 19930408 (199315)
     DE 3486090
                                                      A61K031-56
     PH 26282
                    A 19920410 (199520)
                                                      A61K031-56
                                                                     <--
                    B2 19950517 (199524)
     JP 07045382
                                                 6
                                                      A61K007-06
                                                                     <--
    DK 170726
                    B 19951227 (199606)
                                                      A61K031-56
    WO 8502543 A WO 1984-US1977 19841130; ZA 8409518 A ZA 1984-9518 19841206;
ADT
     EP 165970 A EP 1985-900364 19841130; JP 61500966 W JP 1985-500023
     19841130; EP 165970 B1 WO 1984-US1977 19841130, EP 1985-900364 19841130;
     DE 3486090 G DE 1984-3486090 19841130, WO 1984-US1977 19841130, EP
     1985-900364 19841130; PH 26282 A PH 1984-31556 19841210; JP 07045382 B2 WO
     1984-US1977 19841130, JP 1985-500023 19841130; DK 170726 B WO 1984-US1977
     19841130, DK 1985-3630 19850809
FDT EP 165970 B1 Based on WO 8502543; DE 3486090 G Based on EP 165970, Based
     on WO 8502543; JP 07045382 B2 Based on JP 61500966, Based on WO 8502543;
     DK 170726 B Previous Publ. DK 8503630
PRAI US 1983-560726
                         19831212; US 1985-807623
                                                         19851211
REP DE 2840144; SSR871104; US 4008802; US 4039669; US 4269831; US 4310523; US
     4439432; US 4098802
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ICM A61K007-06; A61K031-56
IC
     ICS A61K007-15; A61K031-555; A61K037-43
          8502543 A UPAB: 19950619
AB
     A topical compsn. for altering the rate and character of
     androgen-stimulated hair growth comprises at least one 5-alpha-reductase
     inhibitor (I) and/or cytoplasmic androgen receptor-binding agent (II), and
     a suitable carrier.
          USE - The normal rate of mole beard hair growth is reduced and its
     character caused to pevert toward the vellus state by the topical
     application of (I) and/or (II). By the proper selection of anti-androgen
     cpds. and their mode of use, unwanted interference with other
     androgen-mediated bodily processes can be minimised or avoided.
     Dwg./0
FS
     CPI
FΑ
     AB
     CPI: B01-C04; B01-C05; B01-C09; B01-D01; B06-D18; B10-F02;
MC
          B12-A07; B12-G01; B12-L05
           165970 B UPAB: 19930925
ABEQ EP
     A cosmetic process for reducing the rate and altering the character of
     androgen-stimulated beard hair growth in intact, sexually mature males,
     which comprises applying to the skin a composition comprising at least one
     antiandrogen agent consisting of a 5-alpha-reductase inhibitor or a
     cytoplasmic androgen receptor-binding agent or a mixture thereof, and a
     dermatologically acceptable carrier.
     ANSWER 16 OF 17 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
L25
     1984-277375 [45]
                        WPIX
ΑN
     C1984-117567
DNC
     Agent for preventing white hair formation - containing oxidising agent and/or
ΤI
     female hormone to activate melanin formation.
DC
     B05 D21
IN
     INABA, M
     (MEDI-N) MED HAIR RES KK
PΑ
CYC
ΡI
                     A 19841107 (198445)* EN
         R: BE DE FR GB IT NL SE
                    A 19841101 (198451)
     AU 8427289
                     A 19841119 (198501)
     JP 59204121
                        19890927 (198939)
     EP 124077
                     В
         R: BE DE FR GB IT NL SE
                    G 19891102 (198945)
     DE 3479859
     EP 124077 A EP 1984-104656 19840425; JP 59204121 A JP 1983-75976 19830428
ADT
PRAI JP 1983-75976
                          19830428
     2.Jnl.Ref; A3...8605; EP 76159; FR 2007366; No-SR.Pub; US 4021538; US
REP
     4390341
IC
     A61K007-06; A61K031-56; A61K033-20
           124077 A UPAB: 19930925
AΒ
     White hair-preventing agent contains at least 1 effective component from
     an oxidising agent and female hormone, in amount sufficient to activate
     tyrosinase or oxidising enzyme which serves to promote formation of
     melanin within follicle melanocytes. Pref. oxidising agents are stabilised
     ClO2, NaBrO3, sodium perborate and KBrO3. Pref. female hormone
     (oestradiol) is contained in a 60% alcohol solution at 5-10 mg/100 ml.. Pref.
     a solution of tyrosine or melanin intermediate is used before, after or
     together with the agent.
          Concentration of stabilised ClO2 is pref. 100-500 ppm, that of NaBrO3 is
     50,000-120,000 ppm, that of KBrO3 is 5-12% and that of sodium perborate is
     5%. Malemin intermediates are e.g. dopa, dopa quinone and halladrome.
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Synergism is observed if oxidising agent and female hormone are used together.

ADVANTAGE - Pigmented hair can be prevented from turning white and growth of pigmented hairs can be promoted. 0/0

FS CPI

in all

FA AB

MC CPI: B01-A02; B05-A01A; B05-A01B; B05-C07; B10-A06; B10-B02E; B12-C09; B12-G04; B12-L05; D08-B03

L25 ANSWER 17 OF 17 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN

AN 1983-45402K [19] WPIX

DNC C1983-044179

TI Depilation preventing hair tonic - obtd. by dissolving egg white in water, decomposing protein(s) by adding proteolytic enzyme trypsin, etc..

DC **D21**

PA (SHIO-I) SHIOZU S

CYC 1

PI JP 58055431 A 19830401 (198319)*

PRAI JP 1981-152261 19810926

IC A61K007-06; A61K031-19; A61K037-18

AB JP 58055431 A UPAB: 19930925

Egg white is dissolved in pure water to convert it into amino acids and nearly all proteins are decomposed by the addition of a proteolytic enzyme trypsin. The aqueous solution is mixed with methionine as a source for SH and methyl gps. for enzymic actions, tocopherol hydrochloride, pyridoxine hydrochloride, salicylic acid, para-hydroxy benzoate, ethanol, and glycerine.

The hair tonic agent can effectively activate hair, fibril, and head skin when used by spreading or coating on the head portion of human body every day, greatly preventing the occurrence of the loss or depilation of hair and accelerating the growth and development of hair. The hair tonic agent can exhibit its excellent therapeutic effect on baldness.

FS CPI

FA AB

MC CPI: D05-A02; D08-B03

=> FIL STNGUIDE

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